# U.S. PLANT PATENT APPLICATION OF

LEONARDUS W. B. M. van RIJN

FOR: ANTHURIUM PLANT NAMED

'CHANGING LOVE'

TITLE: ANTHURIUM PLANT NAMED 'CHANGING LOVE'

APPLICANT: LEONARDUS W.B.M. van RIJN

BOTANICAL CLASSIFICATION/CULTIVAR DESIGNATION:

Anthurium andreanum cultivar Changing Love

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#### BACKGROUND OF THE INVENTION

The present invention relates to a new and distinct cultivar of Anthurium plant, botanically known as *Anthurium andreanum*, and hereinafter referred to by the name 'Changing Love'.

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The new Anthurium is a product of a planned breeding program conducted by the Inventor in Schipluiden, The Netherlands. The objective of the program is to create and develop new compact, freely clumping and freely flowering Anthurium cultivars with strong roots, dark green leaves, attractive spathe color, and good inflorescence longevity.

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The new Anthurium originated from a cross by the Inventor on November 25, 1997 of a proprietary selection of *Anthurium andreanum* identified as code number 9715, not patented, as the female, or seed, parent with a proprietary selection of *Anthurium andreanum* identified as code number 9713, not patented, as the male, or pollen, parent. The cultivar Changing Love was discovered and selected by the Inventor as

a flowering plant within the progeny of the stated cross in a controlled environment in Schipluiden, The Netherlands in January, 2000.

Asexual propagation of the new cultivar by meristem culture in a laboratory in Belgium since March, 2000, has shown that the unique features of this new Anthurium plant are stable and reproduced true to type in successive generations of asexual propagation.

# BRIEF SUMMARY OF THE INVENTION

The new Anthurium has not been observed under all possible environmental conditions. The phenotype may vary somewhat with variations in environment such as temperature and light intensity, without, however, any variance in genotype.

The following traits have been repeatedly observed and are determined to be the unique characteristics of the cultivar Changing Love.

These characteristics in combination distinguish 'Changing Love' as a new and distinct cultivar:

- 1. Upright and outwardly spreading plant habit.
- 2. Freely clumping growth habit.
- 3. Durable dark green leaves.
- 4. Greenish white, green and light red tri-colored spathes with grayed purple veins and grayed purple-colored spadices that

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are positioned slightly above and beyond the foliage on strong and erect scapes.

- 5. Freely flowering habit.
- 6. Good inflorescence longevity.

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Plants of the new Anthurium can be compared to plants of the female parent, the proprietary selection identified as code number 9715. In side-by-side comparisons conducted in Schipluiden, The Netherlands, plants of the new Anthurium differed from plants of the selection 9715 in the following characteristics:

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- 1. Plants of the new Anthurium had darker green-colored leaves than plants of the selection 9715.
- 2. Plants of the new Anthurium had flatter spathes than plants of the selection 9715.
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3. Plants of the new Anthurium and the selection 9715 differed in spathe coloration.

Plants of the new Anthurium can be compared to plants of the male parent, the selection 9713. In side-by-side comparisons conducted in Schipluiden, The Netherlands, plants of the new Anthurium differed from plants of the selection 9713 in the following characteristics:

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1. Plants of the new Anthurium were larger than plants of the selection 9713.

- 2. Plants of the new Anthurium had larger leaves than plants of the selection 9713.
- 3. Plants of the new Anthurium and the selection 9713 differed in spathe coloration.

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Plants of the new Anthurium can be compared to plants of the cultivar Fantasy Love, disclosed in U.S. Plant Patent number 11,771. In side-by-side comparisons conducted in Schipluiden, The Netherlands, plants of the new Anthurium differed from plants of the cultivar Fantasy Love in the following characteristics:

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- 1. Plants of the new Anthurium had flatter and darker greencolored leaves than plants of the cultivar Fantasy Love.
- 2. Plants of the new Anthurium were more freely flowering than plants of the cultivar Fantasy Love.

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3. Spathes of plants of the new Anthurium were larger, flatter and more greenish white in color than spathes of plants of the cultivar Fantasy Love.

#### BRIEF DESCRIPTION OF THE PHOTOGRAPHS

The accompanying colored photographs illustrate the overall appearance of the new Anthurium, showing the colors as true as it is reasonably possible to obtain in colored reproductions of this type. Colors in the photographs may differ slightly from the color values cited

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in the detailed botanical description which accurately describe the colors of the new Anthurium.

The photograph on the first sheet comprises a top perspective view of a typical flowering plant of the cultivar Changing Love. The photograph on the second sheet comprises a close-up view of typical inflorescences of 'Changing Love'.

#### DETAILED BOTANICAL DESCRIPTION

In the following description, color references are made to the Royal Horticultural Society Colour Chart, 2001 Edition, except where general terms of ordinary dictionary significance are used. The aforementioned photographs and the following observations and measurements describe 10-month old plants grown in 14-cm containers in Schipluiden, The Netherlands, in a glass-covered greenhouse with average day temperatures of 23°C, average night temperatures of 21°C and light levels about 6 kilolux.

# **BOTANICAL CLASSIFICATION:**

Anthurium andreanum cultivar Changing Love.

#### PARENTAGE:

Female parent: Proprietary selection of *Anthurium andreanum* identified as code number 9715, not patented.

Male parent: Proprietary selection of *Anthurium andreanum* identified as code number 9713, not patented.

#### PROPAGATION:

Method: By meristem culture.

Time to initiate roots on a meristem-cultured plant: About 28 days at 20 to 24°C.

Time to develop roots on a meristem-cultured plant: About 270 days at 20 to 24°C.

Root description: Thick, fleshy, dark pink to cream-colored; lateral roots, thick and abundant.

# PLANT DESCRIPTION:

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Plant shape: Upright and outwardly spreading plant habit, narrow inverted triangle, symmetrical.

Growth habit: Freely clumping, bushy and dense growth habit; about nine clumps per plant. Appropriate for 14-cm containers; moderately vigorous.

Plant height, from soil level to top of leaf plane: About 35 cm.

Plant height, from soil level to top of inflorescences: About 33 cm.

Plant diameter or spread: About 42 cm.

Crop time: About ten months are usually required from planting of young plants to finished plants in a 14-cm container.

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# Foliage description:

Arrangement: Alternate; simple.

Quantity per plant: About 50.

Length: About 14.4 cm.

Width: About 9.9 cm.

Shape: Deltoid.

Apex: Apiculate.

Base: Cordate.

Margin: Entire.

Texture, upper and lower surfaces: Leathery; glabrous,

smooth; durable.

Venation pattern: Pinnate.

Color:

Developing leaves, upper surface: More green than

146A.

Developing leaves, lower surface: 146B.

Fully developed leaves, upper surface: Slightly more

green than 147A.

Fully developed leaves, lower surface: 146A.

Venation, upper surface: 144A.

Venation, lower surface: 144B.

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### Petiole:

Length: About 23.3 cm.

Diameter, just below geniculum: About 4 mm.

Diameter, at plant base: About 4.5 mm.

Texture: Smooth, glabrous.

Color: 146A to 147A.

Geniculum length: About 1.7 cm.

Geniculum diameter: About 4.5 mm.

Geniculum color: 146A to 147A.

Wing length: About 2.7 cm.

Wing diameter: About 5 mm.

Wing color: 144A.

# INFLORESCENCE DESCRIPTION:

Inflorescence arrangement: Spathes with spadices held slightly above and beyond the foliage. Flowering structures arise from leaf axils. Freely and continuous flowering during the autumn in Schipluiden, The Netherlands. Typically about eight inflorescences per plant. Inflorescences not fragrant.

Inflorescence longevity: Inflorescences last about two months under winter conditions and about three months under summer conditions; inflorescences persistent.

# Spathe:

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Length: About 8.1 cm.

Width: About 5.4 cm.

Shape: Deltoid with cordate tendencies.

Apex: Mucronulate.

Base: Cordate.

Margin: Entire.

Texture, upper and lower surfaces: Leathery; glabrous,

smooth.

10 Aspect: Cupped.

Color:

When opening, front surface: 150D; towards the

base, 145A to 145B.

When opening, back surface: 150D; towards the

base, 144C to 144D.

Fully developed, front surface: 144A to 146B;

central region, 51C; venation, 185B to 185C.

Fully opened, back surface: 144A to 144B; central

region, 51C.

Spadix:

Length: About 5 cm.

Diameter: About 8 mm.

Shape: Columnar, tapering towards the apex; apex, obtuse.

Cross section: Rounded.

Aspect: About 10° from vertical.

5 Color:

Immature: 180B; towards the apex, 179B.

Mature: 184C.

Flowers:

Quantity per spadix: Numerous, about 200.

Shape: Rounded.

Height: Less than 0.5 mm.

Diameter: About 0.8 mm.

Reproductive organs:

Androecium:

15 Anther color: 11D.

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Amount of pollen: Scarce.

Pollen color: 11C.

Gynoecium:

Stigma shape: Ovoid.

Stigma color: N155D.

Ovary color: N155D.

# Scape:

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Length: About 28.6 cm.

Diameter: About 4.5 mm.

Strength: Strong.

Aspect: Erect to slightly outwardly slanted to about 30°

from vertical.

Color: Between 147A and N199A.

Seed and fruit: Seed and fruit development has not been observed on plants of the new Anthurium.

# 10 DISEASE/PEST RESISTANCE:

Under commercial production conditions, plants of the new Anthurium have not been observed to be resistant to pathogens or pests common to Anthurium.

#### TEMPERATURE TOLERANCE:

Plants of the new Anthurium have been observed to tolerate temperatures from about 14 to 36°C.